#### TRANSFORMATIONAL TIMES

"Driving Operational Solutions"



## Business Testing = BT Test and Evaluation Methodology for Business Systems

12 May 2010

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Acting Director, BTA Component Acquisition Executive

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It is imperative that business operations run flexibly, adaptively, and with greater velocity than ever before to support warfighters with the information and resources they need, when they need them.

**DEPUTY SECRETARY OF DEFENSE** 

Gordon R. England



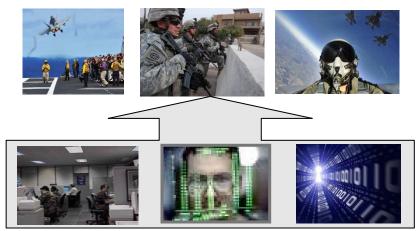
It's Not About Technology... It's About Capability



## DBSAE Mission and Vision Deliver Business Capability to Warfighters



Be recognized as a World Class Acquisition Organization and Trusted Provider of Transformational Business Capabilities

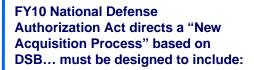


Develop, operate, and drive successful implementation of Combat Support Business Enterprise Solutions for the Warfighter that deliver a solid Foundation for Sovereign Operations for the United States of America

#### Accomplished through:

- Transformation and Innovation
- Transitioning proven systems to sustainment
- A Trained, Agile and Ready Workforce;
  - Skilled
  - Motivated
  - Ethical
  - Diverse

Rapid Acquisition
On Schedule & On Cost



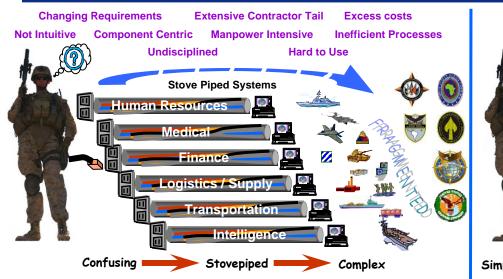
- > Early and continued user involvement
- > Multiple, rapidly executed increments or releases of capability
- > Early, successive prototyping to support evolutionary approaches
- **≻**Congressional report in in 270-days
- > Modular open-system approach

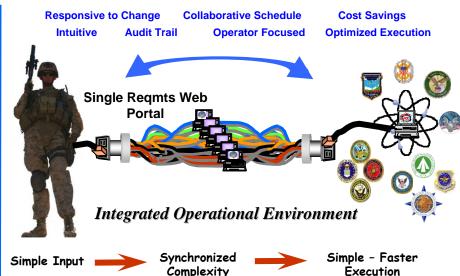


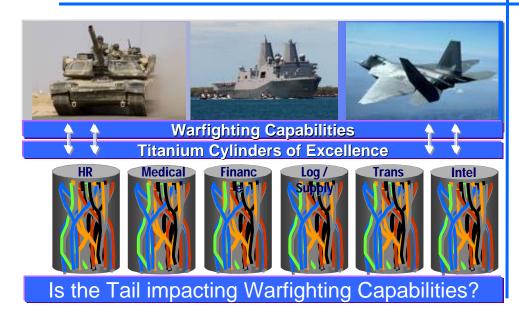




## DBSAE Transformational Vision Deliver Business Capability to Warfighters





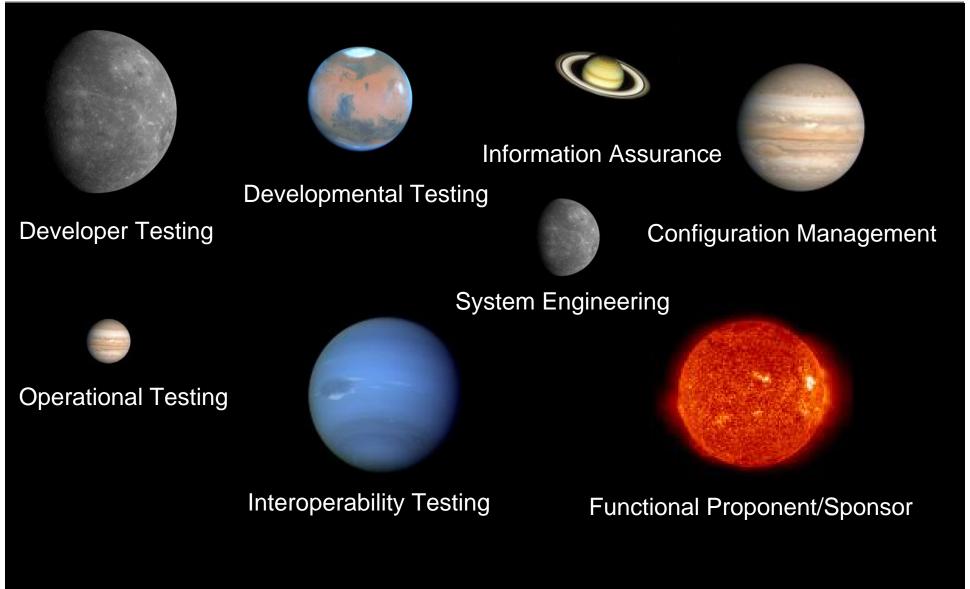








#### Spheres of Influence





### Transforming Testing!!!

Improve Product Quality and Predictability



- Focus on Single Programs (not Enterprise)
- Test Activities Often Duplicated
- Lack of Common Test Tools
- Lack of Focus Early in the Program
- Business IT Tested Like Weapon Systems
- Decision Makers Lack Early Indicators



- Establish Centralized Testing Environments
- Merge Development & Ops Testing
- Reuse of Tools and Test Events
- Integrate Teams Prior to Development
- Create Business IT Testing Processes
- Early Visibility Improves ROI

Goal: Greater insight throughout the program lifecycle!



## Opportunity for Acquisition Transformation: Business "IT" Acquisition

# Current Business IT acquisition is contrary to industry best practicesExecution TimelinesLengthy and delay critical capabilitiesSystem AcquisitonAcquired using DoD process for major weapons systemsDeliveryAverage 91 months to deliver an initial program capabilityDoD TestingTraditionally split into four distinct disciplines

- Test and Evaluation processes provide an opportunity to:
  - Improve overall quality of delivered systems
  - Reduce delivery time
  - Enhance acceptability by end users
  - Effectively use limited funding

Gen James E. Cartwright (VCJCS): "We are building software code and tools based on the aircraft carrier development cycle"



#### Fighting the Storm



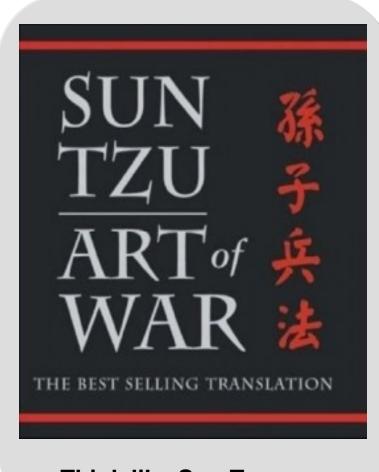


#### **Navigating Calmer Waters**

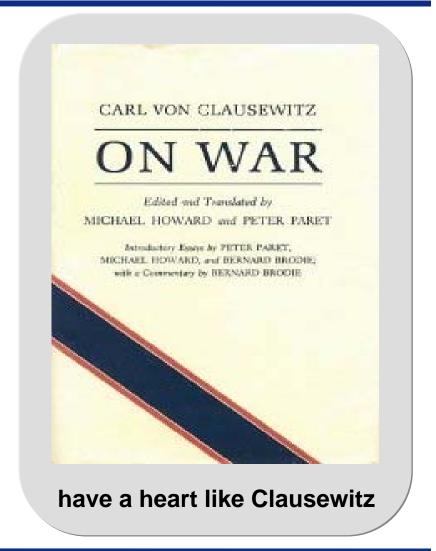




#### Test and Evaluation



Think like Sun Tzu...





#### Testing for Business Systems

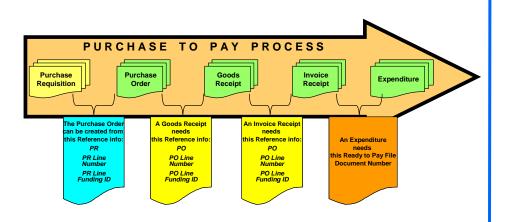
#### Early Planning -- The way ahead to establishing integrated T&E

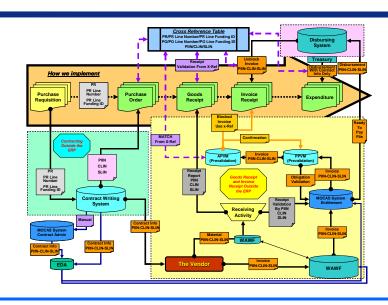
- > Design Integrated T&E Models based on Risk
  - Account for risk in an applied framework
  - System maturity influences testing activities
  - Risk leadership requires accepting appropriate risk
- > Develop an inclusiveness across the four disciplines of T&E
  - Developmental Testing, Information Assurance, Interoperability,
     Operational Testing working cooperatively vice independently
- > Establish an Integrated Test Team (ITT) early
  - Membership extends beyond testing disciplines
  - Includes functional proponent and the program office



#### Enterprise Resource Planning Challenge

#### **Ideal Corporate American End State**





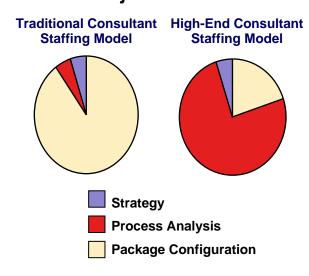
#### **Four Aspects Fundamental to ERPs**

- Acknowledge current IT solutions are not adequate corporate solutions are available
- <u>Determine</u> operational processes must change to align
- Commit Senior Leadership to new methodology
- Enforce change discipline from top to bottom echelons



Implementing an ERP takes commitment and 180° change. When you point a finger to blame... NOTE: there are 3 more pointed back at you...

#### **Major Events**





#### Testing Challenges

#### > Tools

- Effectively Manage Data
- Automate Test Tools
- Use Checklists and Templates

#### > Time

- Conduct event (not time) based T&E
- Integrate Testing and Development

#### > Talent

- Address risk with "Risk Leadership"
- Adjust strategies based on COTS and custom development

#### > Transition

Deliver capability to the warfighter

#### > Tradition

Overcome rigid and inflexible approaches to testing

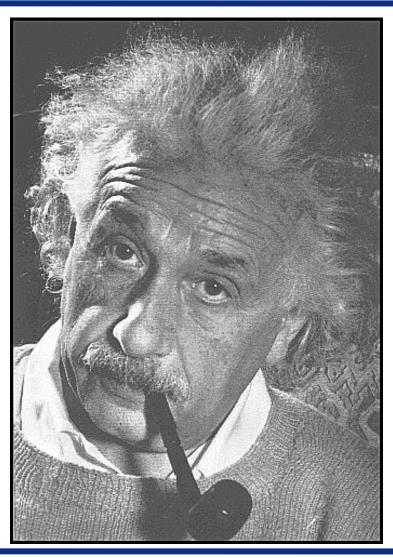








## **Parting Quote**



Any intelligent fool can make things bigger and more complex... It takes a touch of genius - and a lot of courage to move in the opposite direction. "Insanity: Doing the same thing over and over again and expecting different results"

Albert Einstein



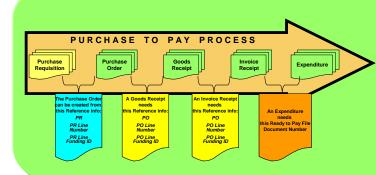




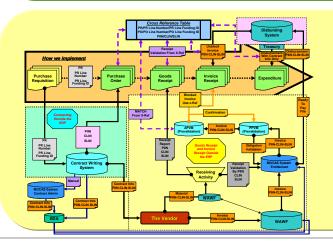
#### Integrate T&E at On-Boarding



- DBSAE gains programs at various stages of system development



- T&E strategies are assessed & tailored
- Apply Integrated testing framework as programs enter portfolio



- Business systems don't fit current T&E mold



## Starting Integrated Testing (by Program)

- Form the ITT
  - Establish a Charter (ACE Template)



- Define the T&E Strategy that addresses a Business System Model
- Participate in the Design Process to ensure a Testable Outcome
- Participate in the RFI/RFQ and follow-on competitive planning processes to ensure testing considerations are included
- Identify and communicate Risks to the Risk Management Team
- Participate in drafting the Tailored Information Support Plan







#### Summary

#### Success is based on:

 A focus on the difference between Business Systems (COTS) and Software Intensive (Custom) Systems

All participating agencies actively supporting the integrated test

model for Business Systems

Changes to IT (Business IT) T&E

Responsive to rapid, iterative development

Requirements priorities evolve

Testing must be risk and capabilities based

Automated Test Tools are essential

Early user identification/participation critical

Teamwork!

